

# HISTORIC PROPERTY INVENTORY FORM

## IDENTIFICATION SECTION

Field Site No. 1908 KE OAHP No. \_\_\_\_\_ Date Recorded 11 Aug 1995  
Site Name Historic Beta Monitoring Building Revised 18 June 1998  
Common Effluent Monitoring Building  
Field Recorder I.C. Lindsay, A.L. Mitchell, J.K. Keating  
Owner's Name U.S. Department of Energy, Richland Operations Office  
Address P.O. Box 550  
City/State/Zip Code Richland, WA 99352

State of Washington, Department of Community Development  
Office of Archaeology and Historic Preservation  
111 21st Avenue Southwest, Post Office Box 48343  
Olympia, Washington 98504-8343 (206)753-4011

## Status

- ☒ Survey/Inventory  
☐ National Register  
☐ State Register  
☐ Determined Eligible  
☐ Determined Not Eligible  
☐ Other (HABS, HAER, NHL)  
☐ Local Designation

## Photography

Photography Neg. No. HCRL: Roll 204; frames 7 & 9  
(Roll No. & Frame No.)  
View of N, E, & W exterior facades  
Date 11 Aug 1995

Photo at right: Roll 204, Frame 7  
View of North and East facades

Classification ☐ District ☐ Site ☒ Building ☐ Structure ☐ Object  
District Status ☒ NR ☐ SR ☐ LR ☐ INV  
Contributing ☒ Non-Contributing ☐  
District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Era Historic District

## Description Section

### Materials & Features/Structural Types

Building Type Industry  
Plan Square  
Structural System Steel Frame  
No. of Stories One

### Roof Type

☐ Gable ☐ Hip  
☒ Flat ☐ Pyramidal  
☐ Monitor ☐ Other (specify) \_\_\_\_\_  
☐ Gambrel  
☐ Shed

### Cladding (Exterior Wall Surfaces)

- ☐ Log  
☐ Horizontal Wood Siding  
Rustic/Drop ☐  
Clapboard ☐  
☐ Wood Shingle  
☐ Board and Batten  
☐ Vertical Board  
☒ Asbestos (corrugated transite siding)  
☐ Brick  
☐ Stone  
☐ Stucco  
☐ Terra Cotta  
☐ Concrete/Concrete Block  
☐ Vinyl/Aluminum Siding  
☐ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_

### Roof Material

☐ Wood Shingle  
☐ Wood Shake  
☐ Composition  
☐ Slate  
☐ Tar/Built-up  
☐ Tile  
☐ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_  
☒ Not visible

### Foundation

☐ Log ☐ Concrete  
☐ Post & Pier ☐ Block  
☐ Stone ☒ Poured  
☐ Brick ☐ Other (specify) \_\_\_\_\_  
☐ Not visible

## Integrity

(Include detailed description in  
Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## LOCATION SECTION

Address Building 1908 KE, 100 K Area  
City/Town/County/Zip Code Richland/Benton County/99352  
Twp 14N Range 26E Section 32 1/4 Section SW 1/4 1/4 Sec \_\_\_\_\_  
Tax No./Parcel No. \_\_\_\_\_ Acreage \_\_\_\_\_  
Quadrangle or map name Coyote Rapids, Washington Quad. - 7.5 min. series 1986  
UTM References Zone 11 Easting 300469 Northing 5169371  
Plat/Block/Lot \_\_\_\_\_  
Supplemental Map(s) \_\_\_\_\_



## High Styles/Forms (Check one or more of the following)

- |   |   |
|---|---|
| <input type="checkbox"/> Greek Revival            | <input type="checkbox"/> Spanish Colonial Revival/Mediterranean |
| <input type="checkbox"/> Gothic Revival           | <input type="checkbox"/> Tudor Revival                          |
| <input type="checkbox"/> Italianate               | <input type="checkbox"/> Craftsman/Arts & Crafts                |
| <input type="checkbox"/> Second Empire            | <input type="checkbox"/> Bungalow                               |
| <input type="checkbox"/> Romanesque Revival       | <input type="checkbox"/> Prairie Style                          |
| <input type="checkbox"/> Stick Style              | <input type="checkbox"/> Art Deco/Art Moderne                   |
| <input type="checkbox"/> Queen Anne               | <input type="checkbox"/> Rustic Style                           |
| <input type="checkbox"/> Shingle Style            | <input type="checkbox"/> International Style                    |
| <input type="checkbox"/> Colonial Revival         | <input type="checkbox"/> Northwest Style                        |
| <input type="checkbox"/> Beaux Arts/Neoclassical  | <input type="checkbox"/> Commercial Vernacular                  |
| <input type="checkbox"/> Chicago/Commercial Style | <input type="checkbox"/> Residential Vernacular (see below)     |
| <input type="checkbox"/> American Foursquare      | <input checked="" type="checkbox"/> Other (specify)             |
| <input type="checkbox"/> Mission Revival          | <u>Industrial Vernacular</u>                                    |

## Vernacular House Types

- |   |  |
|---|--|
| <input type="checkbox"/> Gable Front          | <input type="checkbox"/> Cross Gable           |
| <input type="checkbox"/> Gable Front and Wing | <input type="checkbox"/> Pyramidal/Hipped      |
| <input type="checkbox"/> Side Gable           | <input type="checkbox"/> Other (specify) _____ |

## NARRATIVE SECTION

### Study Unit Themes (check one or more of the following)

☐ Agriculture  
☐ Architecture/Landscape Architecture  
☐ Arts  
☐ Commerce  
☐ Communications  
☐ Community Planning/Development

☐ Conservation  
☐ Education  
☐ Entertainment/Recreation  
☐ Ethnic Heritage (specify) \_\_\_\_\_  
☐ Health/Medicine  
☐ Manufacturing/Industry  
☐ Military

☐ Politics/Government/Law  
☐ Religion  
☐ Science & Engineering  
☐ Social Movements/Organizations  
☐ Transportation  
☒ Other (specify) Cold War Era  
☒ **Study Unit Sub-Theme(s)** Reactor Operations,  
Facility Support (Monitoring)

### Statement of Significance

Date of Construction 1955 Architect/Engineer/Builder Architect: Chas T. Main, Inc./Builder: Kaiser Engineers

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 1908-KE building was used as a beta monitoring building during reactor operation. Monitoring equipment was installed by the General Electric Company. After the reactors were shut-down, the 1908-KE Building was used as an effluent water monitoring building. The building was used to draw water samples from the 100-K Area site drainage sewer pipelines (not to be mistaken with the process sewer used for reactor coolant discharge). The underground site drainage sewer pipeline received waste or discharged water from 100-K Areas buildings (floor drains) which would flow to the 1908-K outfall and discharge into the Columbia River. At the point the pipeline passed under the 1908-KE building on route to 1908-K, samples would be pumped up into the building and tested to ensure nothing harmful was being released into the Columbia River. Testing would be done weekly to measure pH, radioactivity and miscellaneous elements in the water. Additional testing, required by the Environmental Protection Agency per the National Pollution Discharge Elimination System permit, of flow rate and temperature was also conducted. The flow rate measurements were collected by using a calibrated double v-notch weir and adjustable ultrasonic level detector in the 1908-K outfall. Temperature measurements were collected by a thermocouple wire in a manhole located along the pipeline route north of the 1908-KE building. Water monitoring functions are no longer performed in 1908-KE and it is no longer in use, other than as a power supply source for other 100-K Area needs.

The 1908-KE building played an important support role to reactor operations in the 100-K Area by testing waste water from drainage sewer pipelines for quality control prior to discharge into the Columbia River. It is therefore the conclusion of the U.S. Department of Energy that Building 1908-KE is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

### Description of Physical Appearance

The 1908-KE Building is a square, steel framed building with corrugated transite siding, a concrete foundation and a flat roof. The building measures 12 feet square and 10 feet high. There is a single entry door on the east facade and the remaining facades are featureless. Antennas on the roof are connected to the data logger inside the building and transmit testing results and data across the 100-K Area.

The 1908-KE building contained equipment necessary in the sampling process such as a composite sample pump, a drain, a wall-mounted sample cabinet, a data logger for the environmental laboratories, and instruments to analyze and calculate samples. The equipment remains inside the building but has been deactivated and is no longer in use. As mentioned above, the power supply is still connected and used elsewhere in the 100-K Area.

### Major Bibliographic References

Carpenter, R.W. 1994. 100-K Area Technical Baseline Report. Westinghouse Hanford Company. Richland, Washington.

Drawing: H-1-80810

Hunacek, Jerry (DE&S Hanford, Inc.). June 1998. Personal Communication. Richland, Washington.

Larson, Raymond (DE&S Hanford, Inc.). February 1998. Personal Communication. Richland, Washington.

Myott, Earl (DE&S Hanford, Inc.). February 1998. Personal Communication. Richland, Washington.